

The object of the diploma thesis is detailed description of double-ended priority queues. Heap data structure is commonly used as their base. Simultaneously we are trying to uncover behavior of these data structures while working with big data and measure its quality on the basis of obtained results in experimental tests. The aim of the thesis is not to indicate the best min{max heap, but to offer a reader a satisfactory amount of useful information, which enable him to choose an optimal structure in certain conditions.